In the Claims

1. (Currently Amended) A method for enabling communication between a plurality of telephony devices, comprising:

receiving incoming media packets from each telephony device;

dividing an incoming payload section of each incoming media packet into one or more data segments;

mixing the data segments from two or more of the telephony devices to create an aggregate data segment, wherein each data segment has a first length and the aggregate data segment also has the first length ~~having a length equal to a length of each of the data segments mixed to create the aggregate data segment~~; and

constructing an outgoing payload section for one or more of the telephony devices by linking successively generated aggregate data segments.

2. (Original) The method of Claim 1, wherein receiving incoming media packets from each telephony device comprises receiving incoming media packets comprising audio data.

3. (Original) The method of Claim 1, further comprising constructing an outgoing payload section for a telephony device from which incoming media packets were not received by linking a selected number of successively generated aggregate data segments appropriate for the telephony device.

4. (Original) The method of Claim 1, further comprising inserting one or more silence placeholders to fill a time interval during which no incoming media packets are received from a particular telephony device.

5. (Original) The method of Claim 4, further comprising dividing a silence placeholder into one or more silence segments.

6. (Original) The method of Claim 5, further comprising aligning a silence segment from a telephony device with a data segment or a silence segment of one or more of the other telephony devices.

7. (Previously presented) The method of Claim 6, wherein mixing the data segments from two or more of the telephony devices to create an aggregate data segment further comprises:

ignoring silence segments and mixing the aligned data segments from the two or more telephony devices to form an aggregate data segment; and

if only silence segments are aligned, replacing the aligned silence segments with an aggregate silence segment.

8. (Original) The method of Claim 7, wherein constructing an outgoing payload section for one or more of the telephony devices comprises linking a selected number of successively generated aggregate data segments and aggregate silence segments.

9. (Original) The method of Claim 8, further comprising discarding all outgoing payload sections constructed using only aggregate silence segments.

10. (Previously Presented) The method of Claim 1, wherein dividing an incoming payload section of each incoming packet into one or more data segments comprises dividing a first payload section of a first incoming packet into one or more full segments of equal size and a remainder segment containing the remainder of the first payload section.

11. (Original) The method of Claim 10, further comprising dividing a second payload section of a second incoming packet received after the first incoming packet into a completion segment, one or more full segments of equal size, and a remainder segment.

12. (Original) The method of Claim 11, further comprising linking the remainder segment of the first payload section to the completion segment of the second payload section to form a full segment.

13. (Previously Presented) The method of Claim 1, wherein constructing an outgoing payload section for one or more of the telephony devices by linking a selected number of successively generated aggregate data segments comprises constructing a first outgoing payload section for a telephony device by linking one or more full aggregate data segments and a portion of another aggregate data segment, leaving a remainder aggregate data segment.

14. (Original) The method of Claim 13, further comprising constructing a second outgoing payload section by linking the remainder aggregate data segment to one or more successive full aggregate data segments, and a portion of another aggregate data segment.

15. (Previously Presented) A method for enabling payload size conversion, comprising:

receiving incoming media packets from one or more devices;

dividing a first payload section of a first incoming packet into one or more full segments of equal size and a remainder segment containing the remainder of the first payload section; and

constructing an outgoing payload section for the one or more devices by linking a selected number of successive segments.

16. (Original) The method of Claim 14, wherein receiving incoming media packets from one or more device comprises receiving incoming media packets comprising audio data.

17. (Cancelled)

18. (Previously presented) The method of Claim 15, further comprising dividing a second payload section of a second incoming packet received after the first incoming packet into a completion segment, one or more full segments of equal size, and a remainder segment.

19. (Original) The method of Claim 18, further comprising linking the remainder segment of the first payload section to the completion segment of the second payload section to form a full segment.

20. (Original) The method of Claim 15, wherein constructing an outgoing payload section for each device by linking a selected number of successive segments comprises constructing a first outgoing payload section for a device by linking one or more full segments and a portion of another segment, leaving a remainder segment.

21. (Original) The method of Claim 20, further comprising constructing a second outgoing payload section by linking the remainder segment to one or more successive full segments and a portion of another segment.

22. (Currently Amended) An apparatus enabling communication between a plurality of telephony devices, comprising:

a queue operable to receive incoming media packets from the plurality of telephony devices;

a payload segmenter coupled to the queue and operable to divide an incoming payload section of each incoming packet into one or more data segments;

a mixer coupled to the payload segmenter and operable to mix the data segments from two or more of the telephony devices to create an aggregate data segment, wherein each data segment has a first length and the aggregate data segment also has the first length ~~having a length equal to a length of each of the data segments mixed to create the aggregate data segment~~; and

a reassembly buffer coupled to the mixer and operable to construct an outgoing payload section for one or more telephony devices by linking successively generated aggregate data segments.

23. (Original) The apparatus of Claim 22, further comprising an input transcoder operable to convert data in the incoming payload sections into a common media format.

24. (Original) The apparatus of Claim 23, wherein the input transcoder is operable to convert audio data in the incoming payload section to G.711 encoded audio data.

25. (Previously Presented) The apparatus of Claim 24, wherein:

the queue is further operable to insert one or more silence placeholders to fill a time interval during which no incoming media packets are received from a particular telephony device;

the payload segmenter is further operable to divide a silence placeholder into one or more silence segments; and

the mixer is further operable to ignore silence segments and mix the data segments from the two or more telephony devices to form an aggregate data segment, and if only silence segments exist, operable to replace the silence segments with an aggregate silence segment.

26. (Previously presented) The apparatus of Claim 25, wherein the payload segmenter is further operable to:

divide a first payload section of a first incoming packet into one or more full segments of equal size and a remainder segment containing the remainder of the first payload section; and

divide a second payload section of a second incoming packet received after the first incoming packet into a completion segment, one or more full segments of equal size, and a remainder segment.

27. (Original) The apparatus of Claim 26, further comprising an input buffer coupled to the payload segmenter and operable to link the remainder segment of the first payload section to the completion segment of the second payload section to form a full segment.

28. (Currently Amended) A communication network, comprising:

a plurality of telephony devices operable to transmit media packets, the media packets each having a payload section including telecommunication data, the payload sections transmitted from at least one of the telephony devices having a different size than the payload sections transmitted from the other telephony devices; and

a bridge, including:

a queue operable to receive incoming media packets from the plurality of telephony devices;

a payload segmenter coupled to the queue and operable to divide an incoming payload section of each incoming packet into one or more data segments;

a mixer coupled to the payload segmenter and operable to mix the data segments from two or more of the telephony devices to create an aggregate data segment , wherein each data segment has a first length and the aggregate data segment also has the first length ~~having a length equal to a length of each of the data segments mixed to create the aggregate data segment~~; and

a reassembly buffer coupled to the mixer and operable to construct an outgoing payload section for one or more telephony devices by linking successively generated aggregate data segments.

29. (Previously presented) The communication network of Claim 28, wherein the bridge further comprises an input transcoder operable to convert the telecommunication data in the payload sections of the received media packets into a common media format.

30. (Original) The communication network of Claim 29, wherein the input transcoder is operable to convert audio data in the incoming payload sections to G.711 encoded audio data.

31. (Previously Presented) The communication network of Claim 30, wherein:

the queue is further operable to insert one or more silence placeholders to fill a time interval during which no incoming media packets are received from a particular telephony device;

the payload segmenter is further operable to divide a silence placeholder into one or more silence segments; and

the mixer is further operable to ignore silence segments and mix the data segments from the two or more telephony devices to form an aggregate data segment, and if only silence segments exist, operable to replace the silence segments with an aggregate silence segment.

32. (Previously presented) The communication network of Claim 28, wherein the payload segmenter is further operable to:

divide a first payload section of a first incoming packet into one or more full segments of equal size and a remainder segment containing the remainder of the first payload section; and

divide a second payload section of a second incoming packet received after the first incoming packet into a completion segment, one or more full segments of equal size, and a remainder segment.

33. (Original) The communication network of Claim 32, wherein the bridge further comprises an input buffer coupled to the payload segmenter and operable to link the remainder segment of the first payload section to the completion segment of the second payload section to form a full segment.

34. (Currently Amended) A program embodied in a computer readable medium and operable to perform the following steps:

receiving incoming media packets from a plurality of telephony devices;

dividing an incoming payload section of each incoming media packet into one or more data segments;

mixing the data segments from two or more of the telephony devices to create an aggregate data segment, wherein each data segment has a first length and the aggregate data segment also has the first length ~~having a length equal to a length of each of the data segments mixed to create the aggregate data segment~~; and

constructing an outgoing payload section for one or more of the telephony devices by linking successively generated aggregate data segments.

35. (Original) The program of Claim 34, wherein receiving incoming media packets from each telephony device comprises receiving incoming media packets comprising audio data.

36. (Original) The program of Claim 34, further operable to construct an outgoing payload section for a telephony device from which incoming media packets were not received by linking a selected number of successively generated aggregate data segments appropriate for the telephony device.

37. (Original) The program of Claim 34, further operable to insert one or more silence placeholders to fill a time interval during which no incoming media packets are received from a particular telephony device.

38. (Original) The program of Claim 37, further operable to divide a silence placeholder into one or more silence segments.

39. (Original) The program of Claim 38, further operable to align a silence segment from a telephony device with a data segment or a silence segment of one or more of the other telephony devices.

40. (Previously presented) The program of Claim 39, wherein mixing the aligned data segments from two or more of the telephony devices to create an aggregate data segment further comprises:

ignoring silence segments and mixing the aligned data segments from the two or more telephony devices to form an aggregate data segment; and

if only silence segments are aligned, replacing the aligned silence segments with an aggregate silence segment.

41. (Original) The program of Claim 40, wherein constructing an outgoing payload section for one or more of the telephony devices comprises linking a selected number of successively generated aggregate data segments and aggregate silence segments.

42. (Original) The program of Claim 41, further operable to discard all outgoing payload sections constructed using only aggregate silence segments.

43. (Previously presented) The program of Claim 34, wherein dividing an incoming payload section of each incoming packet into one or more data segments comprises dividing a first payload section of a first incoming packet into one or more full segments of equal size and a remainder segment containing the remainder of the first payload section.

44. (Original) The program of Claim 43, further operable to divide a second payload section of a second incoming packet received after the first incoming packet into a completion segment, one or more full segments of equal size, and a remainder segment.

45. (Original) The program of Claim 44, further operable to link the remainder segment of the first payload section to the completion segment of the second payload section to form a full segment.

46. (Previously presented) The program of Claim 34, wherein constructing an outgoing payload section for one or more of the telephony devices by linking a selected number of successively generated aggregate data segments comprises constructing a first outgoing payload section for a telephony device by linking one or more full aggregate data segments and a portion of another aggregate data segment, leaving a remainder aggregate data segment.

47. (Original) The program of Claim 46, further operable to construct a second outgoing payload section by linking the remainder aggregate data segment to one or more successive full aggregate data segments, and a portion of another aggregate data segment.

48. (Previously presented) A program embodied in a computer readable medium and operable to perform the following steps:

receiving incoming media packets from one or more devices;

dividing a first payload section of a first incoming packet into one or more full segments of equal size and a remainder segment containing the remainder of the first payload section; and

constructing an outgoing payload section for one or more devices by linking a selected number of successive segments.

49. (Original) The program of Claim 48, wherein receiving incoming media packets from one or more device comprises receiving incoming media packets comprising audio data.

50. (Cancelled)

51. (Previously presented) The program of Claim 48, further operable to divide a second payload section of a second incoming packet received after the first incoming packet into a completion segment, one or more full segments of equal size, and a remainder segment.

52. (Original) The program of Claim 51, further operable to link the remainder segment of the first payload section to the completion segment of the second payload section to form a full segment.

53. (Original) The program of Claim 48, wherein constructing an outgoing payload section for each device by linking a selected number of successive segments comprises constructing a first outgoing payload section for a device by linking one or more full segments and a portion of another segment, leaving a remainder segment.

54. (Original) The program of Claim 53, further operable to construct a second outgoing payload section by linking the remainder segment to one or more successive full segments and a portion of another segment.

55. (Previously presented) An apparatus enabling communication between a plurality of telephony devices, comprising:

a queue operable to receive incoming media packets from the plurality of telephony devices;

a payload segmenter coupled to the queue and operable to divide a first payload section of a first incoming packet into one or more full data segments of equal size and a remainder data segment containing the remainder of the first payload section; and

a reassembly buffer coupled to the payload segmenter and operable to construct an outgoing payload section for one or more telephony devices by linking successive data segments.

56. (Previously presented) The apparatus of Claim 55, further comprising an input transcoder operable to convert data in the payload sections of the incoming media packets into a common media format.

57. (Original) The apparatus of Claim 56, wherein the input transcoder is operable to convert audio data in the incoming payload section to G.711 encoded audio data.

58. (Previously presented) The apparatus of Claim 55, wherein the payload segmenter is further operable to divide a second payload section of a second incoming packet received after the first incoming packet into a completion segment, one or more full segments of equal size, and a remainder segment.

59. (Original) The apparatus of Claim 58, further comprising an input buffer coupled to the payload segmenter and operable to link the remainder segment of the first payload section to the completion segment of the second payload section to form a full segment.